

# Project Need and Roundabout Advantages

## Reasons for Project:

- Improve Intersection Operations
- Improve Intersection Safety
- Provide for Future Increasing Traffic Levels

## Why Choose a Roundabout?

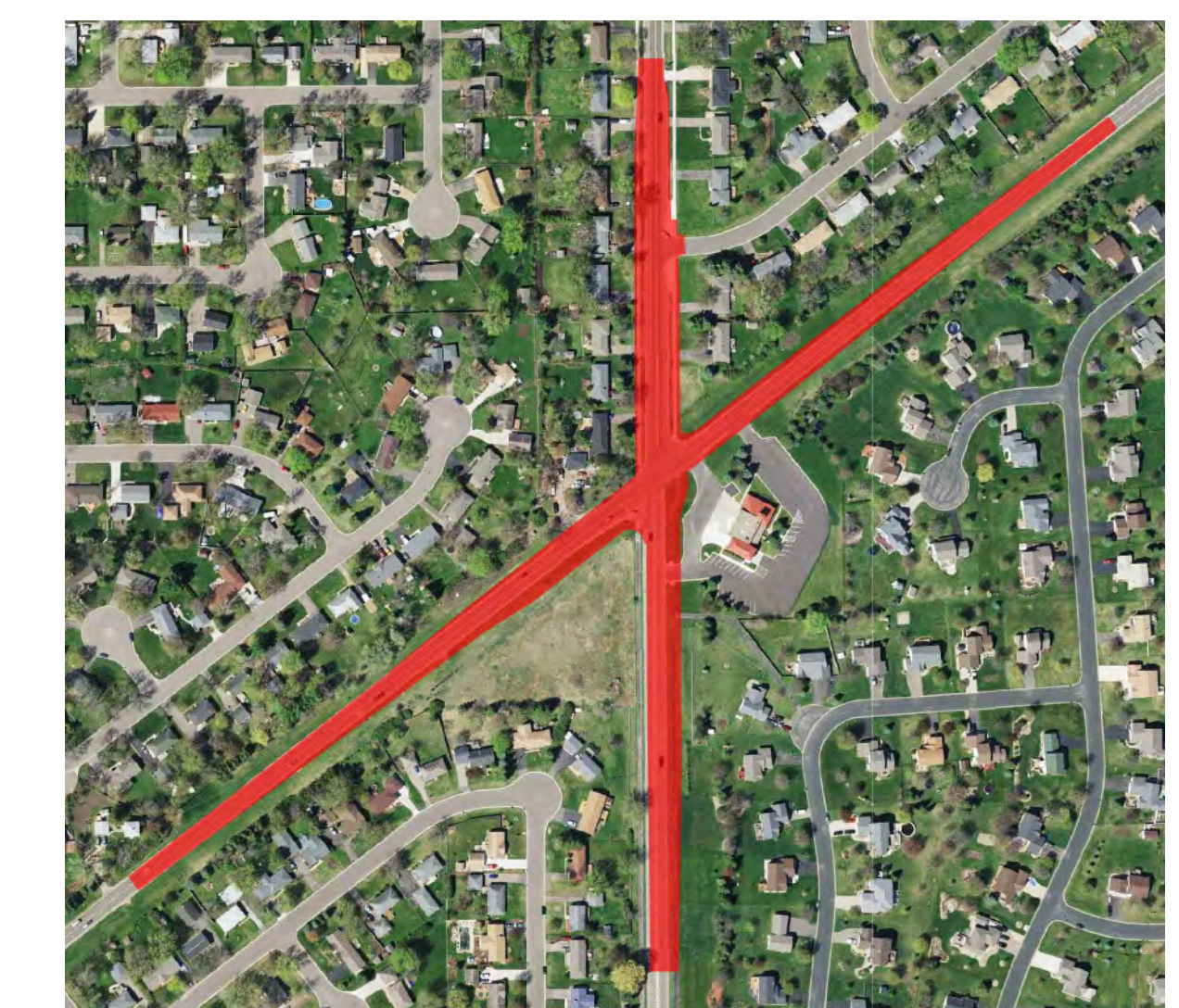
Attribute	Advantage		Reason
	Roundabout	Signal	
Project Footprint	X		The overall footprint is smaller for a roundabout. A signal would require a left turn lane at each approach. See Footprint Comparisons at right
Safety	X		Roundabouts compared to other intersections: <ul style="list-style-type: none"> <li>• 90% reduction in fatalities</li> <li>• 76% reduction in injuries</li> <li>• 35% reduction in crashes</li> <li>• Slower speeds safer for pedestrians/bicycles</li> </ul>
Cost	X		Project cost is expected to be approximately 10% less for a roundabout compared to a signal, primarily due to the reduced project footprint
Traffic Operations	X		Current peak hour delay times are greater than 2 minutes. Expected traffic signal peak hour delay times are up to 30 seconds. Expected roundabout peak hour delay times are up to 14 seconds. During all other hours a roundabout will also have reduced delay times when compared to a traffic signal.
Fire Station Access	X		Emergency vehicles can enter traffic at lower speeds, and fire station access points will not be interrupted by queuing from a traffic signal or all-way stop
Intersection Skew	X		Roundabouts improve visibility at skewed intersections

## Footprint Comparisons:

Roundabout:



Signal:



The roundabout footprint is 30% smaller than the signal footprint, due to signals needing long turn lanes. The roundabout impacts 3 access points to the north, while the signal would impact up to 13 properties.

